

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An acoustic signal-processing apparatus comprising:

a band-dividing unit operable to divide ~~a low frequency component in an entering~~ acoustic signal into divided ~~filtered~~ components that belong to several frequency bands;

~~a formational condition establishing unit operable to establish a formational condition in such a manner that a plurality of overtone components to be generated meet a given condition;~~

an overtone-generating unit operable to generate, ~~according to the established~~ ~~formational condition~~ under predetermined conditions, one or more ~~the plurality of overtone~~ components based on each of the divided ~~filtered~~ components that belong to the several frequency bands; and

a combining unit operable to combine the entering acoustic signal with the one or more ~~plurality of overtone~~ components generated by said overtone-generating unit,

wherein the predetermined conditions include:

a condition that a first maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to a first frequency band among the several frequency bands is not greater than a second maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to a second frequency band among the several frequency bands, the second frequency band being lower than the first frequency band; and

a condition that a third maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to the highest frequency band

among the several frequency bands is less than a fourth maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to the lowest frequency band among the several frequency bands.

2-4. (Canceled)

5. (Currently Amended) An acoustic signal-processing apparatus as defined in claim [[1]] 22, wherein the single degree of overtone component is established ~~formational condition~~ defines generation of the plurality of overtone components for each of the several frequency bands, the plurality of overtone components having at least one of a reachable least degree and a ~~degree greater than the reachable least degree, the~~ a reachable least degree, the reachable least degree being a least degree that reaches an envisaged speaker reproducible band.

6-8. (Canceled)

9. (Currently Amended) An acoustic signal-processing apparatus as defined in claim [[7]] 22, wherein the single degree is set in such a manner that one or more ~~the plurality of~~ overtone components generated based on the divided ~~filtered~~ components that belong to the several frequency bands have frequencies non-overlapped with each other.

10. (Currently Amended) An acoustic signal-processing apparatus as defined in claim 1, wherein each of the one or more ~~plurality of~~ overtone components have amplitude set to

decrease with an increase in frequency.

11. (Currently Amended) An acoustic signal-processing method comprising:

dividing ~~a low frequency component in an entering acoustic signal into divided ~~filtered~~~~ components that belong to several frequency bands;

~~establishing a formational condition in such a manner that a plurality of overtone components meet a given condition;~~

generating, ~~according to the established formational condition~~ under predetermined conditions, one or more ~~the plurality of~~ overtone components based on each of the divided ~~filtered~~ components that belong to the several frequency bands; and

combining the entering acoustic signal with the one or more ~~plurality of~~ overtone components,

wherein the predetermined conditions include:

a condition that a first maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to a first frequency band among the several frequency bands is not greater than a second maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to a second frequency band among the several frequency bands, the second frequency band being lower than the first frequency band; and

a condition that a third maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to the highest frequency band

among the several frequency bands is less than a fourth maximum degree among one or more degrees of the one or more overtone components generated based on a component belonging to the lowest frequency band among the several frequency bands.

12-20. (Canceled)

21. (New) An acoustic signal-processing apparatus as defined in claim 1, wherein the one or more overtone components generated by said overtone-generating unit are within a range capable of being reproduced by a speaker,

wherein the predetermined conditions further include:

a condition that a first least degree among one or more degrees of the one or more overtone components generated based on a component belonging to the highest frequency band is not greater than a second least degree among one or more degrees of the one or more overtone components generated based on a component belonging to the lowest frequency band.

22. (New) An acoustic signal-processing apparatus as defined in claim 21, wherein the predetermined conditions further include:

a condition that only a single degree of overtone component is generated with respect to each band of the several frequency bands.